

SPECIFICATION:

Title: Replace with following new title—Method and Apparatus for Monitoring Biological Cell Culture, [Method and Apparatus for Monitoring Biological Substance].

Paragraph [02] (Page 1-2), replace with the following new paragraph:

Existing biological culture equipments range from simple incubators, incubator shakers, or shakers to sophisticated and expensive bioreactors. Among them, the incubator/shakers for small to medium volume (10ml ~1000ml) biological culture containers like flasks are the most widely used equipments. Here the term incubator/shakers refer to [incubators,] incubator shakers or shakers that including shaking platforms. This conventional culture method has been used for many many years. However, so far, there is no an on-line detection system being developed for monitoring the growth curve of biological culture with such equipments.